



# **ADVANCED NUCLEAR DIRECTORY**

**Developers, Suppliers,  
and National Laboratories**

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## NATIONAL LABORATORIES

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## INTRODUCTION

This directory was created in partnership between the Gateway for Accelerated Innovation in Nuclear (GAIN) and Third Way, with the help of the United States Nuclear Infrastructure Council (USNIC). It offers a sample of companies engaged in the development of advanced nuclear technologies and should not be considered a comprehensive list of this industry. All companies featured have participated on a voluntary basis and are responsible for the information provided. Inclusion of a company does not indicate endorsement by any of the directory's sponsors.





## GATEWAY FOR ACCELERATED INNOVATION IN NUCLEAR

[gain.inl.gov/SitePages/Home.aspx](http://gain.inl.gov/SitePages/Home.aspx)

The mission of the GAIN initiative is to provide the nuclear energy industry with access to the technical, regulatory, and financial support necessary to move advanced nuclear technologies toward commercialization, while ensuring the continued reliable and economic operation of the existing nuclear reactor fleet. GAIN offers a single point of access to the broad range of capabilities across the Department of Energy (DOE) national laboratory complex. DOE has invested billions of dollars to build and maintain expertise and infrastructure within the national laboratory system. This vast capability is being leveraged via GAIN to support commercialization of new advanced nuclear technologies.

**Location:** GAIN is managed out of the Idaho National Laboratory

**Founded:** November 2015

**Director:** Rita Baranwal

**Federal Engagement:** DOE–NE, NRC, NSUF, NEUP, LWRS, NEAMS, ART

### Preferred Point of Contact

Lori Braase: [lori.braase@inl.gov](mailto:lori.braase@inl.gov)





# DEVELOPERS



## ADVANCED REACTOR CONCEPTS LLC

[www.arcnuclear.com/](http://www.arcnuclear.com/)

ARC is seeking to commercialize a disruptive new technology for power generation in the form of an advanced small modular reactor offering 100 MWe. The reactor will be factory-built and offer the customer a twenty-year refueling cycle that provides fixed fuel costs for 20+ years.

**Location:** Chevy Chase, MD

**Founded:** September 2006

**Principal/CEO:** Donald Wolf

**Major Investors:** Founders and Insiders

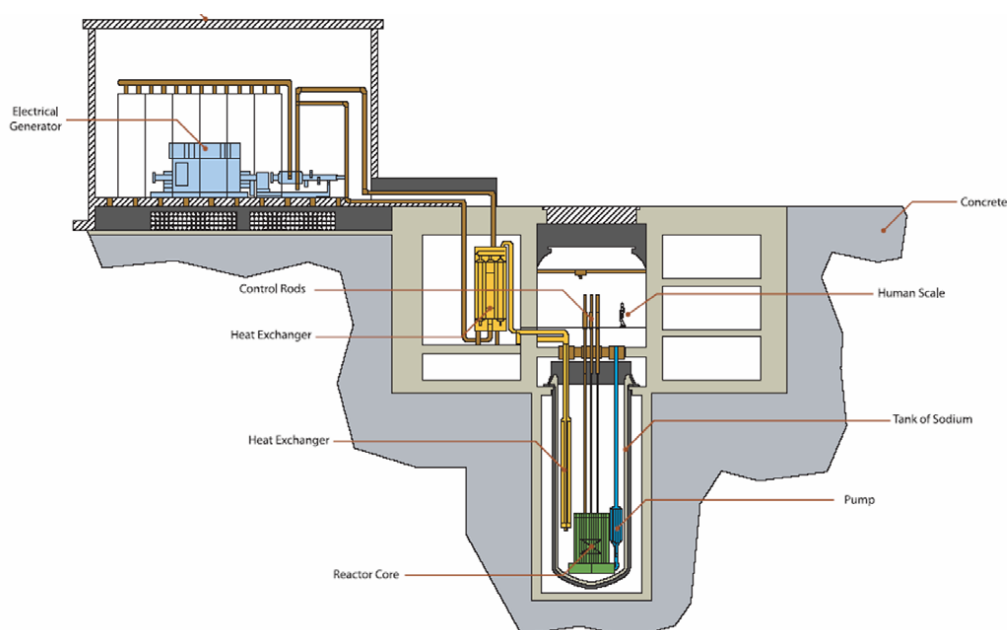
**Technology Class:** Liquid Metal Cooled

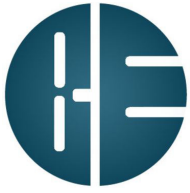
**Reactor Type:** Sodium fast reactor with metal fuel

**Power Output (MWe and MWt):** 100MWe/260MWt

### Preferred Point of Contact

[info@ARCnuclear.com](mailto:info@ARCnuclear.com)





## BRILLOUIN ENERGY CORP.

[www.brillouinenergy.com/](http://www.brillouinenergy.com/)

Brillouin Energy Corp. is a clean-technology company located in Berkeley California, which is developing ultra-clean, low-cost, renewable energy technologies capable of producing commercially useful amounts of thermal energy. Brillouin's technologies are based on low energy nuclear reactions ("LENR"), which it generates on a controlled basis in its uniquely designed reactors.

**Location:** Berkeley, CA

**Founded:** January 2000

**Principal/CEO:** Robert W. George

**Major Investors:** Angel Investors

**Technology Class:** Gas Cooled

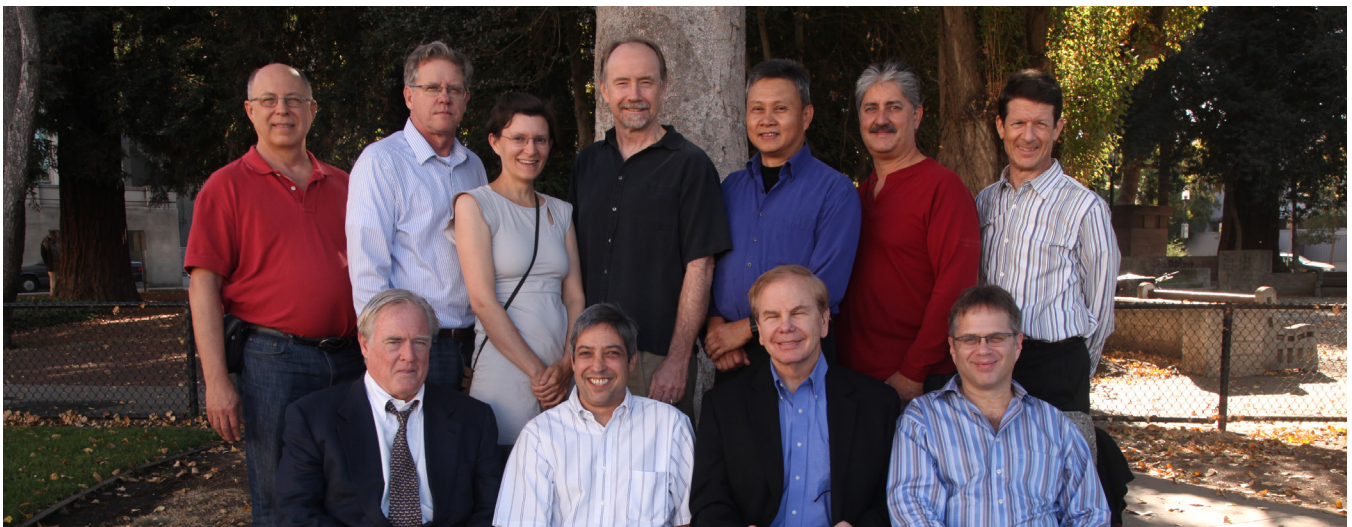
**Reactor Type:** Green Energy, Low Energy Nuclear Reactions

**Power Output (MWe and MWt):** 25 kWt

**Federal Engagement:** NRC

### Preferred Point of Contact

Robert W. George: [RWGeorge@BrillouinEnergy.com](mailto:RWGeorge@BrillouinEnergy.com)







## COLUMBIA BASIN CONSULTING GROUP

[www.cbcgllc.com](http://www.cbcgllc.com)

CBCG is a business management and technical consulting firm which provides services relating to advanced reactor engineering and development.

**Location:** Kennewick, WA

**Founded:** May 1998

**Principal/CEO:** William J. Stokes

**Major Investors:** Self-Funded

**Technology Class:** Liquid Metal Cooled

**Reactor Type:** Lead-Bismuth and Sodium

**Power Output (MWe and MWt):** 260 MWe/600MWt; 100 MWe/250MWt

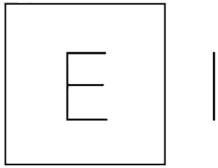
**Federal Engagement:** DOE, GAIN, Other

### Preferred Point of Contact

William J. Stokes: [info@cbcgllc.com](mailto:info@cbcgllc.com)



**CBCG PbBi Nuclear Plant Development - Power When You Need it to BE-THERE**



## ELYSIUM INDUSTRIES

[www.elysiumindustries.com/](http://www.elysiumindustries.com/)

Elysium Industries is developing molten chloride salt fast reactor technology to unlock the abundance of clean, safe, and inexpensive energy for our growing globalized and digitized world.

**Location:** Schenectady, NY

**Founded:** March 2015

**Principal/CEO:** President Youssef Ballout, CTO Ed Pheil, CEO Carl Perez

**Technology Class:** Liquid Salt Fueled/Cooled MSRs, Using the term “cooled” is misleading as there are salt cooled (solid fueled, salt cooled or salt fueled with the cooling salt being salt or something else. Most are liquid salt fueled, and secondary salt cooled.

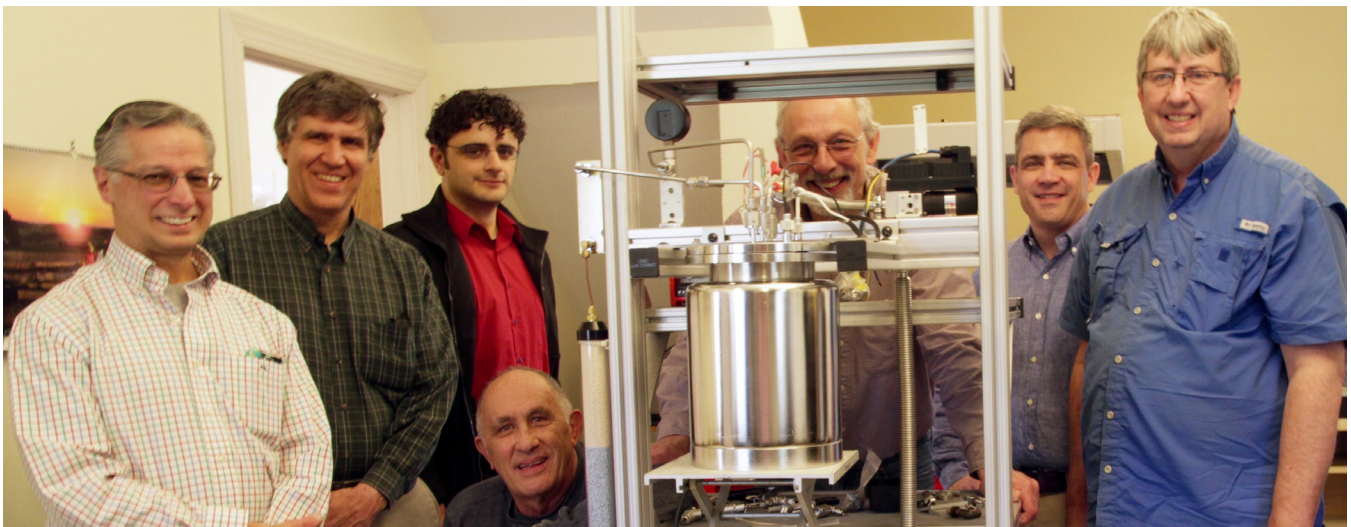
**Reactor Type:** Molten Chloride Salt Fast Reactor (MCSFR)

**Power Output (MWe and MWt):** 20 MWe (125MWt) – 2000MWe (5000MWt) for MCSFR I design. MCSFR II design will be lower MWt

**Federal Engagement:** DOE, GAIN, Other

### Preferred Point of Contact

Ed Pheil: [e.pheil@elysium-v.com](mailto:e.pheil@elysium-v.com)





The logo for General Fusion, featuring the word "generalfusion" in white lowercase letters on a red rectangular background.

## GENERAL FUSION

**generalfusion.com**

General Fusion is the world's most advanced private fusion technology venture, pursuing a faster and more practical path to commercially viable fusion energy.

**Location:** Vancouver, B.C., Canada; Washington, D.C., USA

**Founded:** April 2002

**Principal/CEO:** Christofer Mowry

**Major Investors:** Bezos Expeditions, Khazanah Nasional, Chrysalix Energy VC, Braemar Energy Ventures, SET Ventures, Cenovus Energy, BDC Canada, GrowthWorks, Entrepreneurs Fund, Sustainable Development Technology Canada

**Technology Class:** Fusion

**Reactor Type:** Magnetized Target Fusion

**Power Output (MWe and MWt):** 200MWe

**Federal Engagement:** Other

### Preferred Point of Contact

Tim Howard: [tim.howard@generalfusion.com](mailto:tim.howard@generalfusion.com)



# HolosGen™

## HOLOSGEN LLC

[www.holosgen.com](http://www.holosgen.com)

HolosGen develops mobile scalable integral nuclear generators with simplified and innovative designs that are optimized to produce economical, distributable, pollutant-free and, most importantly, safe electricity.

**Location:** Manassas Park, VA

**Founded:** September 2017

**Principal/CEO:** Claudio Filippone

**Technology Class:** Gas Cooled

**Reactor Type:** High-Temperature Gas Reactor

**Power Output (MWe and MWt):** 3 to 81 MWe; 5 to 135 MWt

### Preferred Point of Contact

Claudio Filippone





## HYBRID POWER TECHNOLOGIES LLC

[www.hybridpowertechnologies.com](http://www.hybridpowertechnologies.com)

Hybrid Power Technologies LLC develops and promotes a new family of hybrid power plants that use nuclear and fossil fuel sources. The hybrid-nuclear approach is a major technological breakthrough that offers the real possibility of energy independence and a sustainable energy future.

**Location:** Overland Park, KS

**Founded:** June 2011

**Principal/CEO:** Michael F. Keller

**Major Investors:** Privately funded

**Technology Class:** Gas Cooled

**Reactor Type:** Graphite Moderated, Helium Cooled

**Power Output (MWe and MWt):** 630 MWe/950 MWt

### Preferred Point of Contact

Michael F. Keller: [m.keller@hybridpwr.com](mailto:m.keller@hybridpwr.com)







## MAGNETO-INERTIAL FUSION TECHNOLOGIES, INC. (MIFTI)

[www.mifti.com](http://www.mifti.com)

MIFTI specializes in fusion energy and medical isotope technology.

**Location:** Tustin, CA

**Founded:** November 2009

**Principal/CEO:** Gerald Simmons, Chairman/CEO

**Major Investors:** DOE/ARPA-E, Strong Atomics Fund 1

**Technology Class:** Thermonuclear Fusion

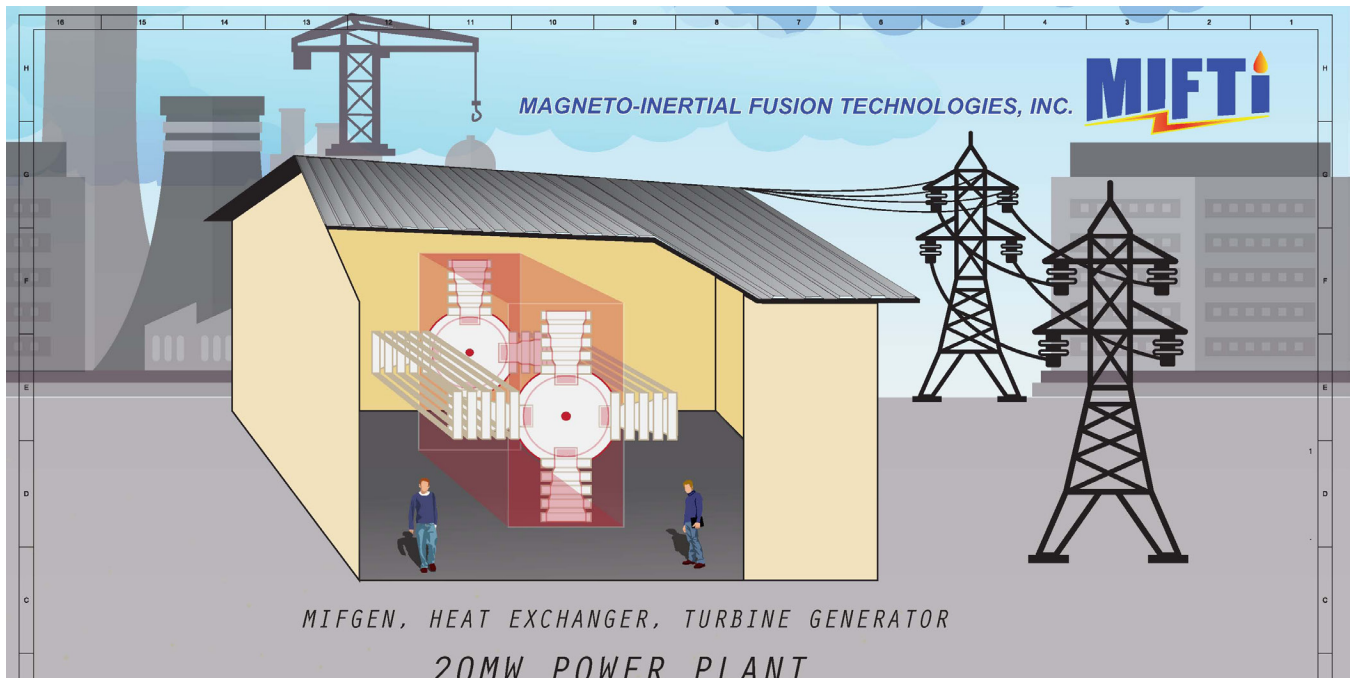
**Reactor Type:** Nuclear Fusion Reactor

**Power Output (MWe and MWt):** 20MWe

**Federal Engagement:** DOE, ARPA-E

### Preferred Point of Contact

Jerry Simmons





## NUSCALE POWER

[www.nuscalepower.com](http://www.nuscalepower.com)

NuScale is developing SMR that integrate the reactor, steam generator, pressurizer, and containment into a single module. Nuclear power plants using NuScale technology can be designed to accommodate growing electrical demand by simply adding additional modules as the need arises.

**Location:** OR, NC, MD, VA, WA; London, UK

**Founded:** July 2007

**Principal/CEO:** John Hopkins

**Major Investors:** Fluor Corporation

**Technology Class:** Water Cooled

**Reactor Type:** Integral Pressurized Water Reactor (IPWR) based on light water reactor technology

**Power Output (MWe and MWt):** 50 MWe

**Federal Engagement:** DOE, NRC

### Preferred Point of Contact

Lenka Kollar: [lkollar@nuscalepower.com](mailto:lkollar@nuscalepower.com)



## SILICON ACCELERATOR, INC (SAI)

SAI designs small computer chip-driven accelerator-based fission/fusion power systems.

**Location:** San Francisco, CA

**Founded:** January 2006

**Principal/CEO:** CEO & CTO Ed Pheil

**Technology Class:** Accelerator driven direct ion to electricity conversion

**Reactor Type:** Heavy Ion Inertial Confinement Fission/Fusion, Preferred p B11 fission to He4

**Power Output (MWe and MWt):** mW to 1MWe max. per module

**Federal Engagement:** Other

### Preferred Point of Contact

Ed Pheil: e.pheil@elysium-v.com





## TERRAPOWER, LLC

[terrapower.com](http://terrapower.com)

TerraPower is a nuclear innovation company that originated with Bill Gates and a group of like-minded visionaries who evaluated the fundamental challenges to raising living standards around the world. TerraPower's mission is to be a world leader in new nuclear technologies, while developing innovators and future leaders in the nuclear field.

**Location:** Bellevue, WA

**Founded:** January 2008

**Principal/CEO:** Bill Gates, Chairman; Lee McIntire, CEO; Chris Levesque, President

**Technology Class:** Liquid metal and salt cooled

**Reactor Type:** Traveling Wave Reactor (TWR) – sodium-cooled fast reactor; Molten Chloride Fast Reactor (MCFR) – molten salt/liquid fuel fast reactor

**Power Output (MWe and MWt):** Various (up to 1200MWe) for both concepts

**Federal Engagement:** DOE, NRC

### Preferred Point of Contact

[inquiries@terrapower.com](mailto:inquiries@terrapower.com)



# TERRESTRIAL ENERGY

## TERRESTRIAL ENERGY

[www.terrestrialenergy.com/](http://www.terrestrialenergy.com/)

Terrestrial Energy is developing an advanced reactor power plant based on proven molten salt reactor technology for 2020s deployment.

**Location:** Oakville, Canada; New York, USA; London, UK

**Founded:** January 2013

**Principal/CEO:** Simon Irish

**Major Investors:** Canadian Government; Private investors

**Technology Class:** Salt Cooled

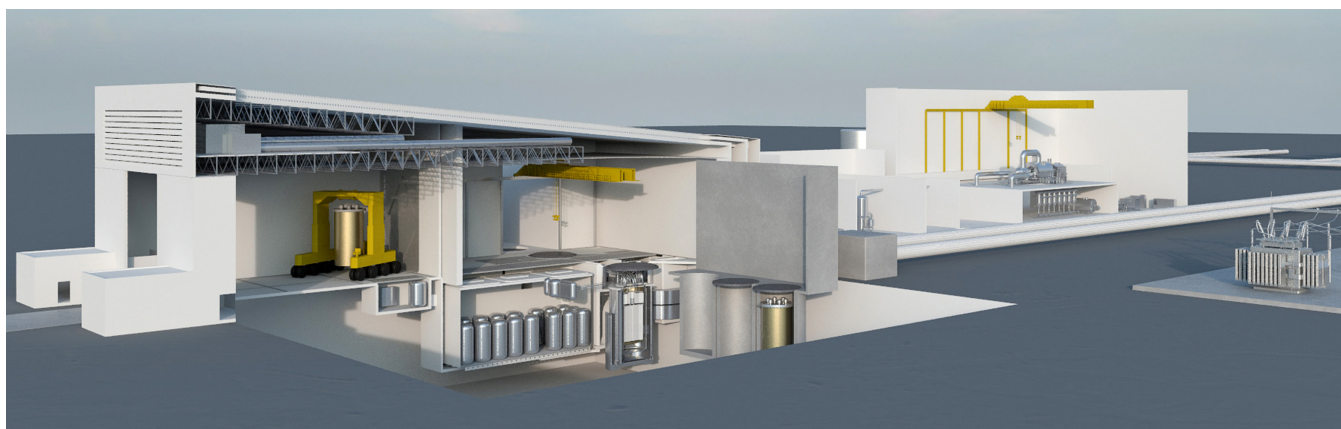
**Reactor Type:** Molten Salt Reactor

**Power Output (MWe and MWt):** 190MWe/400MWt

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC

### Preferred Point of Contact

Canon Bryan: [cbryan@terrestrialenergy.com](mailto:cbryan@terrestrialenergy.com)





## THORCON INTERNATIONAL

[thorconpower.com](http://thorconpower.com)

ThorCon is developing a hybrid thorium/uranium liquid fission power plant that generates clean, full-time electric power at a cost cheaper than coal.

**Location:** Singapore; Stevenson, WA

**Founded:** August 2016

**Principal/CEO:** Lars Jorgensen, CEO

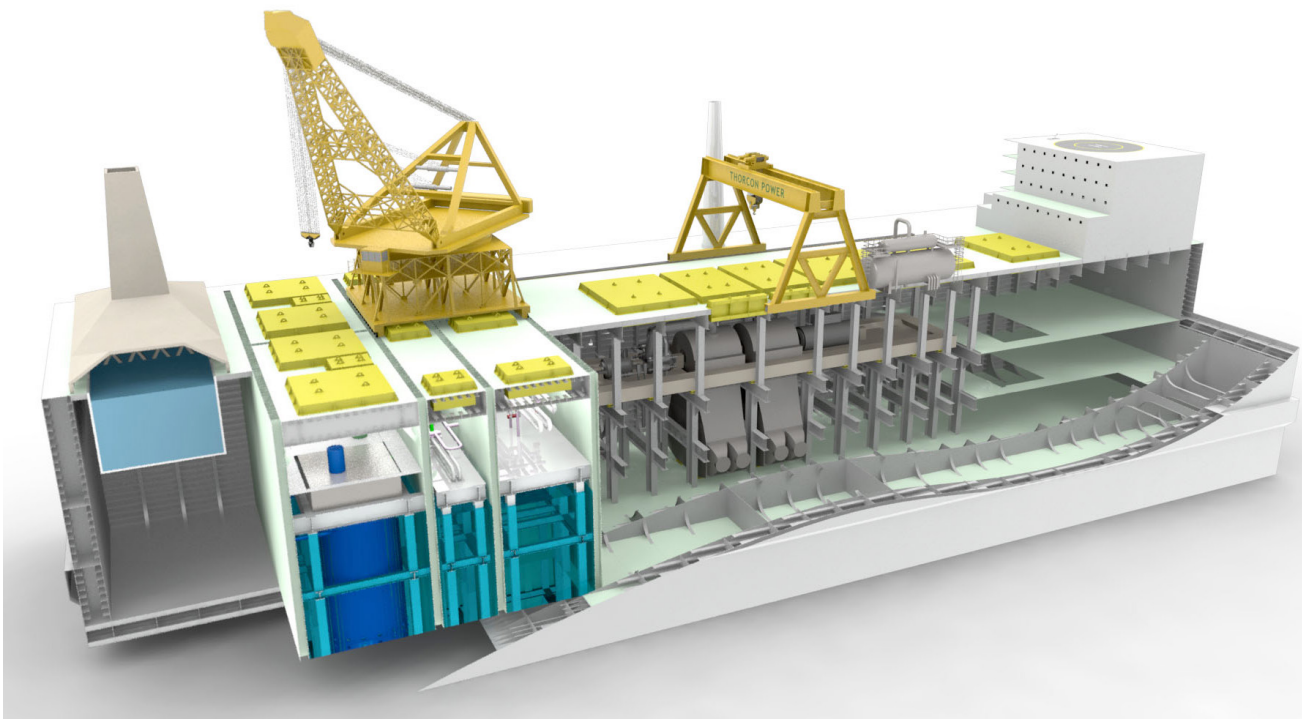
**Technology Class:** Salt Cooled

**Reactor Type:** Thermal Molten Salt Reactor

**Power Output (MWe and MWt):** 250 MWe/557 MWt per power module

### Preferred Point of Contact

[info@thorconpower.com](mailto:info@thorconpower.com)







## TRANSATOMIC POWER

[www.transatomicpower.com/](http://www.transatomicpower.com/)

Transatomic is designing a thermal-spectrum molten salt reactor fueled by fresh uranium.

**Location:** Cambridge, MA

**Founded:** April 2011

**Principal/CEO:** Dr. Leslie Dewan

**Major Investors:** Founders Fund, Acadia Woods Partners, Daniel Aegerter

**Technology Class:** Molten Salt-Fueled

**Reactor Type:** Thermal spectrum, uranium-fueled molten salt reactor

**Power Output (MWe and MWt):** 520 MWe/1250 MWt

**Federal Engagement:** GAIN, NRC

### Preferred Point of Contact

Dr. Leslie Dewan: [ldewan@transatomicpower.com](mailto:ldewan@transatomicpower.com)





## WESTINGHOUSE ELECTRIC COMPANY LLC

[westinghousenuclear.com/New-Plants/Lead-cooled-Fast-Reactor](http://westinghousenuclear.com/New-Plants/Lead-cooled-Fast-Reactor)

Westinghouse Electric Company is the world's leading supplier of safe and innovative nuclear technology, providing utility customers around the world with the most reliable, dependable nuclear power plants, nuclear fuel, plant automation and operating plant products and services. Westinghouse is driven by its powerful history and experience, ground-breaking ideas, focus on safety and sustainability, and our strong team of approximately 10,000 employees around the world.

**Location:** USA, Canada, Asia, India, Japan, South Korea, UAE, Africa, Europe, United Kingdom

**Founded:** January 1886

**Principal/CEO:** José Emeterio Gutiérrez, President and CEO

**Major Investors:** Westinghouse Electric Company LLC

**Technology Class:** Liquid Metal Cooled

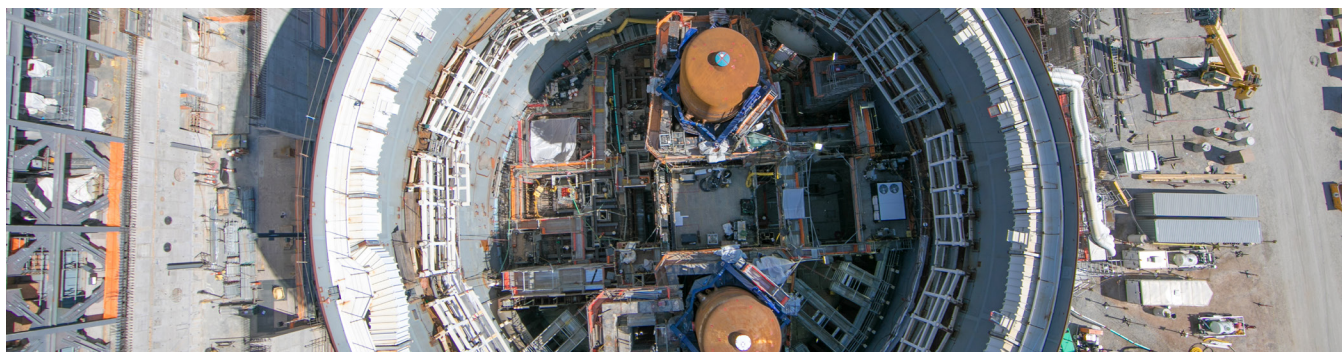
**Reactor Type:** Lead-cooled Fast Reactor: 400–500 MWe, 950MWt (preceded by a lower power prototype); Heat Pipe Cooled Reactor: 0.5–50 MWe, 2MWt – 100MWt, CHP (600°C max temperature)

**Power Output (MWe and MWt):** 400–500 MWe/950MWt (preceded by a lower power prototype)

**Federal Engagement:** DOE

### Preferred Point of Contact

Layla Sandell: [sandell@westinghouse.com](mailto:sandell@westinghouse.com)





## X-ENERGY, LLC

[www.x-energy.com](http://www.x-energy.com)

X-energy is a nuclear reactor and fuel design engineering services company developing Generation IV, high-temperature gas-cooled nuclear reactor designs that are smaller, simpler and meltdown-proof when compared to conventional nuclear designs.

**Location:** Greenbelt, MD

**Founded:** September 2009

**Principal/CEO:** Dr. Kam Ghaffarian

**Technology Class:** Gas Cooled

**Reactor Type:** High Temperature Gas Cooled Pebble Bed Reactor

**Power Output (MWe and MWt):** 76MWe/200MWt

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC

### Preferred Point of Contact

Jeff Harper: [jharper@x-energy.com](mailto:jharper@x-energy.com)







## YELLOWSTONE ENERGY

[www.yellowstone.energy](http://www.yellowstone.energy)

Yellowstone Energy focuses on advanced nuclear reactor design.

**Location:** Knoxville, TN

**Founded:** October 2016

**Principal/CEO:** Matt Ellis

**Technology Class:** Salt Cooled

**Reactor Type:** Molten Salt Reactor

**Power Output (MWe and MWt):** 200 MWe/500 MWt

**Federal Engagement:** DOE

### Preferred Point of Contact

Matt Ellis: 208-344-3570





# SUPPLIERS

# AECOM

## AECOM

[www.aecom.com](http://www.aecom.com)

AECOM is a global network of experts working with clients, communities and colleagues to develop and implement innovative solutions to the world's most complex challenges, from delivering clean water and energy to helping governments maintain stability and security. AECOM connects expertise across services, markets, and geographies to deliver transformative outcomes.

**Location:** Aiken, SC

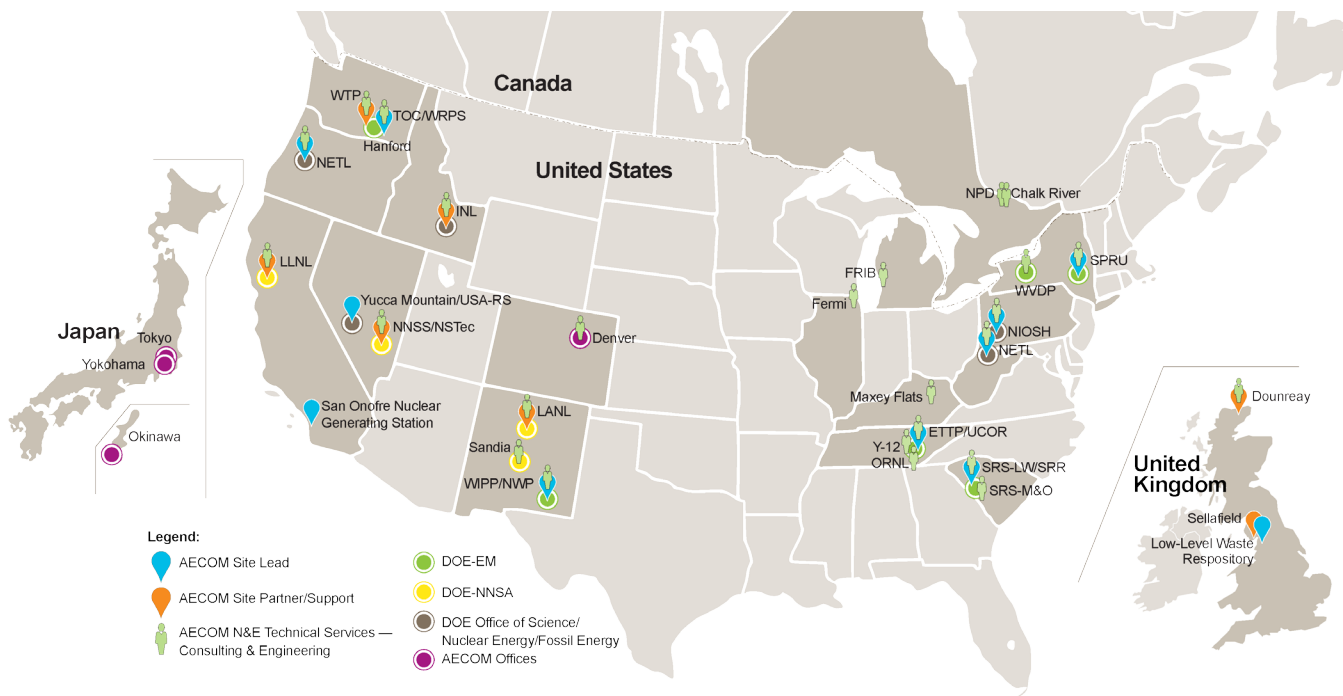
**Founded:** April 1990

**Principal/CEO:** Mike Burke

**Federal Engagement:** DOE, Other

### Preferred Point of Contact

Eric Knox: [eric.knox@aecom.com](mailto:eric.knox@aecom.com)





INNOVATING **NUCLEAR** TECHNOLOGY  
ANALYSIS AND MEASUREMENT SERVICES CORPORATION

## ANALYSIS AND MEASUREMENT SERVICES CORPORATION (AMS)

[www.ams-corp.com](http://www.ams-corp.com)

AMS provides the worldwide nuclear industry with products and services to measure I&C performance and verify compliance with technical specifications and regulatory requirements.

**Location:** Knoxville, Tennessee

**Founded:** July 1977

**Principal/CEO:** Dr. H.M. Hashemian

**Federal Engagement:** DOE, GAIN, Other

### Preferred Point of Contact

Dr. H.M. Hashemian: [info@ams-corp.com](mailto:info@ams-corp.com)

# Cutting edge technology

*AMS offers diagnostic testing for I&C, EMC OLM, Rod Control, Rod Positioning, troubleshooting and more. Our trained engineers have years of experience in keeping nuclear plants operating safely and at peak performance*



## AREVA NP (AREVA INC.)

[www.avea-np.com/EN/home-57/index.html](http://www.avea-np.com/EN/home-57/index.html)

AREVA NP provides services and fuel for all types of nuclear reactors including I&C systems, thermal hydraulic testing, and research on advanced reactor designs and systems.

**Location:** Charlotte, NC; Lynchburg, VA; Richland, WA

**Founded:** April 1989

**Principal/CEO:** Gary Mignogna

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

### Preferred Point of Contact

Darryl Gordon: 202.969.3240







## BURNS & MCDONNELL

[www.burnsmcd.com](http://www.burnsmcd.com)

Burns & McDonnell is a fully integrated engineering, architecture, construction, environmental, and consulting solutions firm focusing on the power industry with annual revenues over \$2.5 billion.

**Location:** Kansas City, MO; over 40 offices globally

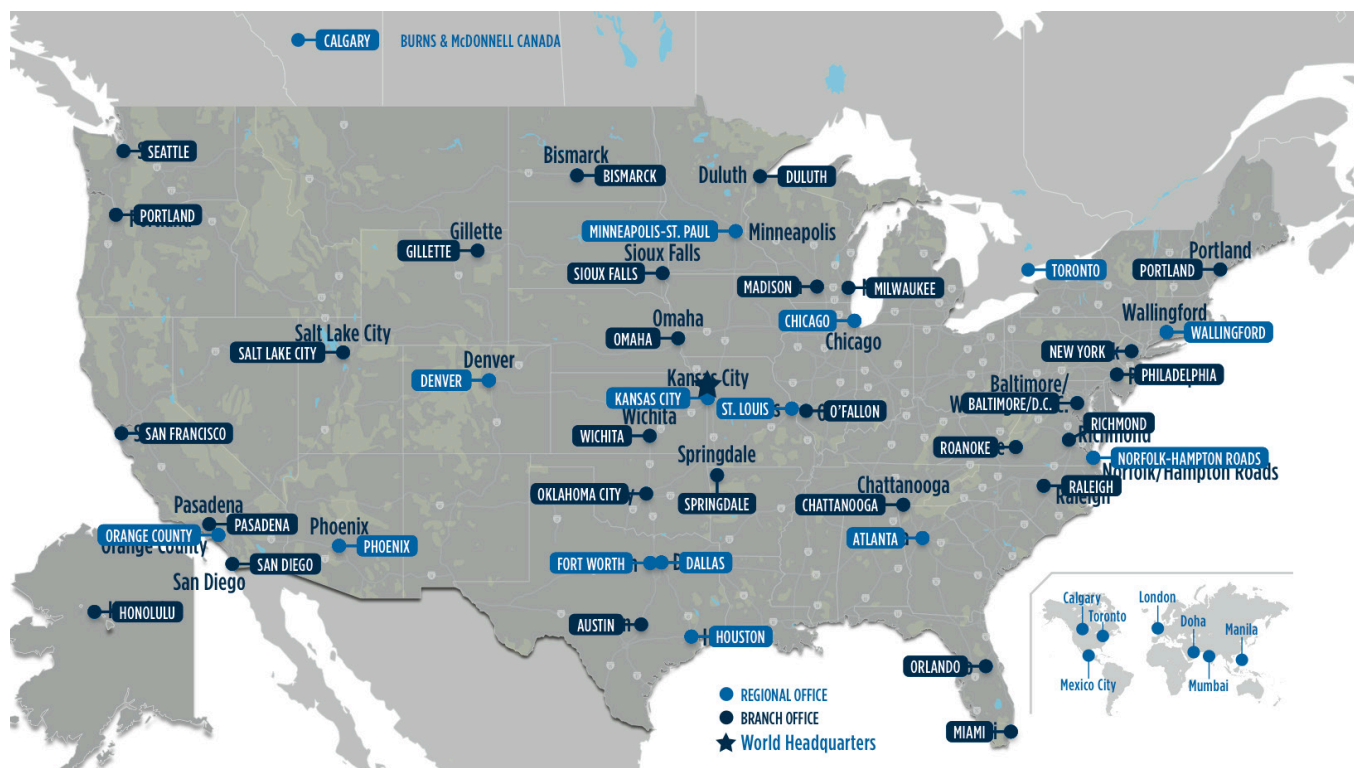
**Founded:** January 1898

**Principal/CEO:** Ray Kowalik

**Federal Engagement:** DOE, NRC, Other

### Preferred Point of Contact

Glenn Neises: [gneises@burnsmcd.com](mailto:gneises@burnsmcd.com)







## BWXT TECHNOLOGIES, INC.

[www.bwxt.com](http://www.bwxt.com)

BWXT has been involved in the nuclear industry since its beginning. As a federal contractor, BWXT provides nuclear components and fuel for the US Navy's submarine and aircraft carrier fleet. Commercially, BWXT manufactures heavy components for CANDU reactors, provides services for the US and Canadian nuclear markets, and provides engineering and design capabilities for advanced reactor technologies and fuel.

**Location:** Offices in VA, OH, IN, TN, and Ontario, Canada

**Founded:** January 2017

**Principal/CEO:** Rex Geveden

**Federal Engagement:** DOE, NRC, Other

### Preferred Point of Contact

Joe Miller: [jkmiller@bwxt.com](mailto:jkmiller@bwxt.com)





## CENTRUS TECHNICAL SOLUTIONS

[www.centrusenergy.com](http://www.centrusenergy.com)

Centrus Energy Corp. is a trusted supplier of the world's most diversified supply of enriched uranium fuel for civilian nuclear power reactors, with expertise in uranium enrichment, uranium chemistry and nuclear fuel transportation.

**Location:** Oak Ridge, TN

**Founded:** July 1998

**Principal/CEO:** Larry Cutlip, Vice President Field Services

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

### Preferred Point of Contact

Larry Cutlip: [cutlipb@centrusenergy.com](mailto:cutlipb@centrusenergy.com)







## CERAMIC TUBULAR PRODUCTS

[www.ctp-usa.com](http://www.ctp-usa.com)

Ceramic Tubular Products develops and supplies very high temperature ceramic tubes and materials for existing and future nuclear and solar thermal applications.

**Location:** Lynchburg, VA

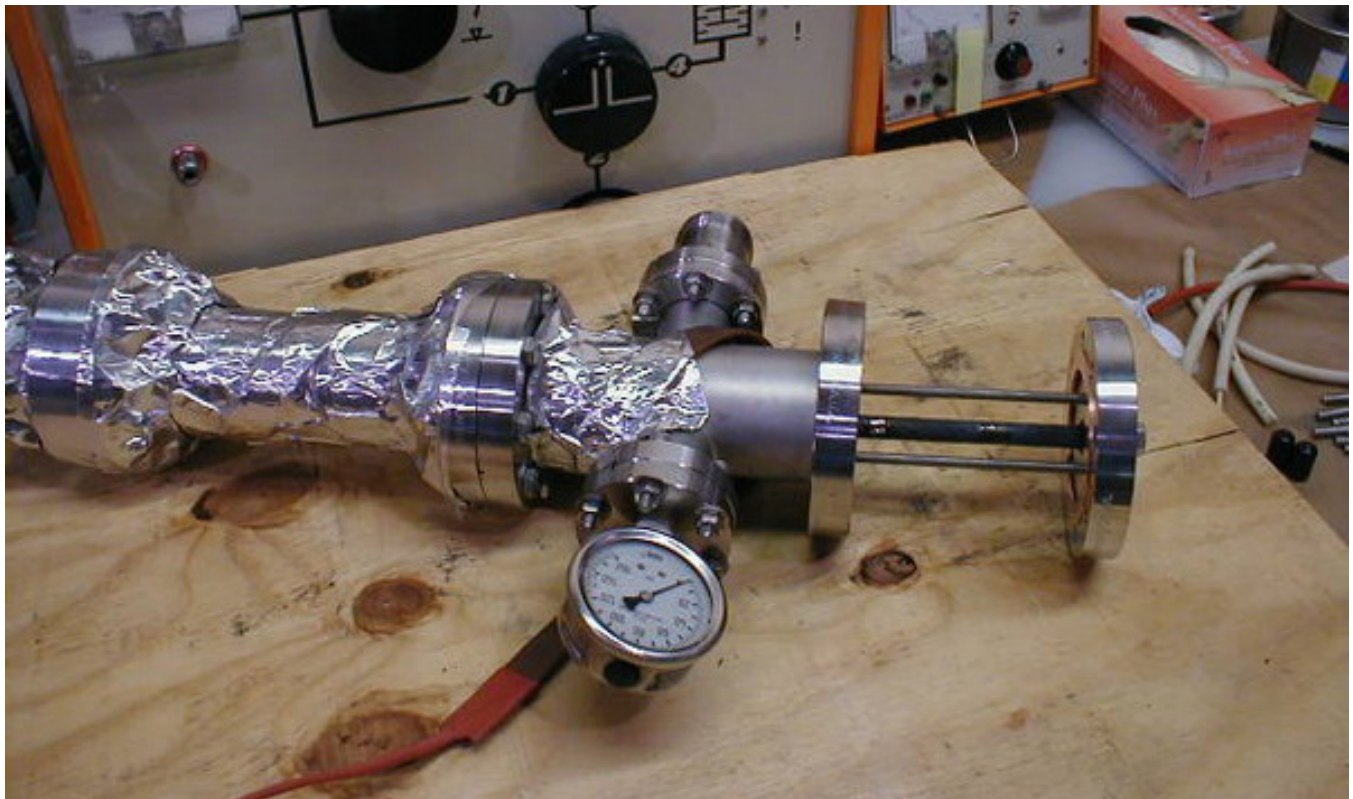
**Founded:** October 2006

**Principal/CEO:** Jeffrey Halfinger

**Federal Engagement:** DOE, GAIN

### Preferred Point of Contact

Jeffrey Halfinger: 301-946-2381



## **COMPETITIVE ACCESS SYSTEMS (CAS), INC.**

CAS, Inc. develops self-recharging nuclear battery technologies.

**Location:** Wylie, TX

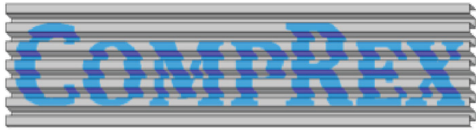
**Founded:** June 1996

**Principal/CEO:** Eric Delangis

### **Preferred Point of Contact**

Linda Delangis: [ldelangis@neukenergy.com](mailto:ldelangis@neukenergy.com)





FinRex® and ShimRex® Technologies

## COMPREX, LLC

[www.comprex-llc.com](http://www.comprex-llc.com)

CompRex, LLC designs custom compact heat exchangers and compact heat exchange reactors for a wide range of chemical process applications where efficient heat transfer is critical.

**Location:** De Pere, WI

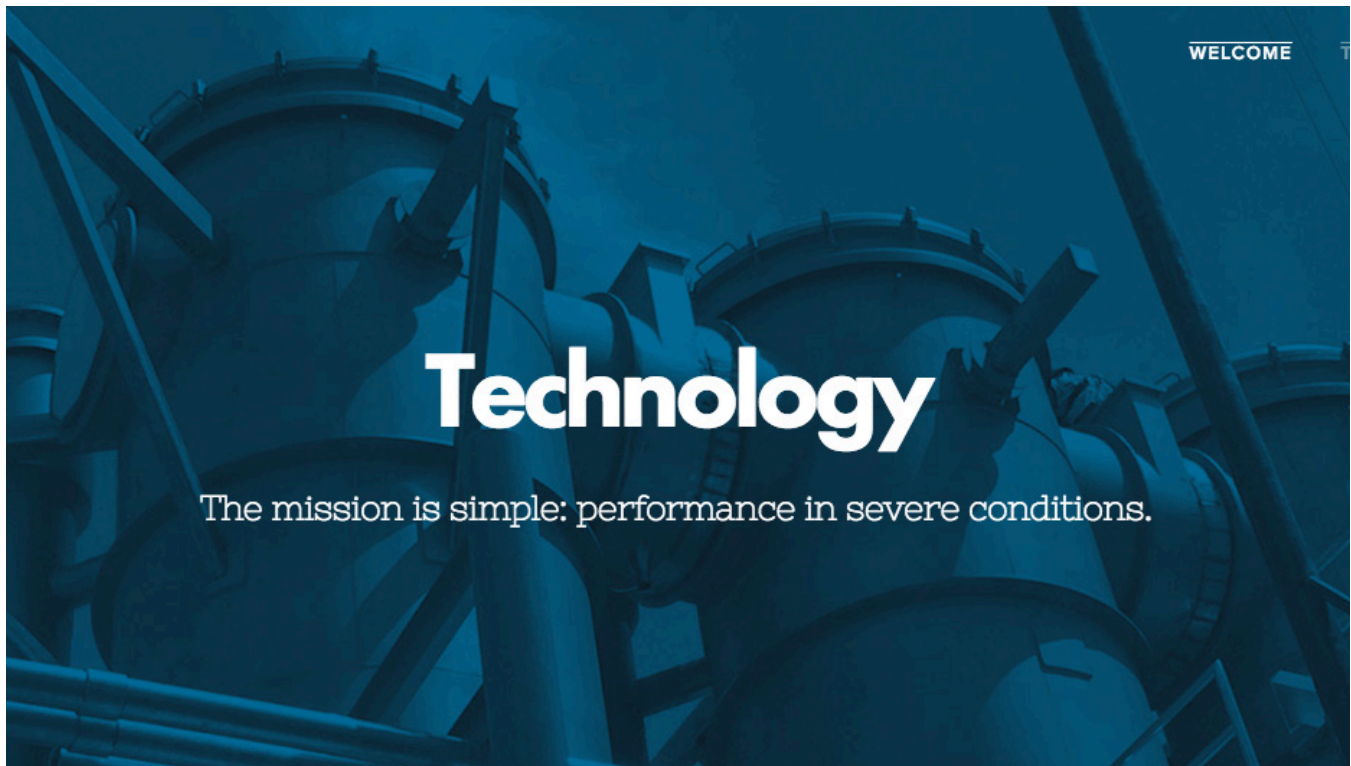
**Founded:** April 2014

**Principal/CEO:** Zhijun Jia

**Federal Engagement:** DOE, GAIN

### Preferred Point of Contact

Zhijun Jia: [Zhijun.jia@comprex-llc.com](mailto:Zhijun.jia@comprex-llc.com)





## CONCURRENT TECHNOLOGIES CORPORATION

[www.ctc.com](http://www.ctc.com)

Concurrent Technologies Corporation specializes in the development of technologies for advanced manufacturing.

**Location:** Johnstown, PA

**Founded:** August 1987

**Principal/CEO:** Ed Sheehan

**Federal Engagement:** DOE, GAIN

### Preferred Point of Contact

Robert Akans: 703-310-5652



# Advanced Engineering and Manufacturing



## CURTISS-WRIGHT

[www.curtisswright.com/markets/power-generation/default.aspx](http://www.curtisswright.com/markets/power-generation/default.aspx)

Curtiss-Wright provides advanced products and services in support of the nuclear power industry.

**Location:** Civil nuclear power focused offices in CA, ID, FL, PA, OH, NY, CT, and AL.

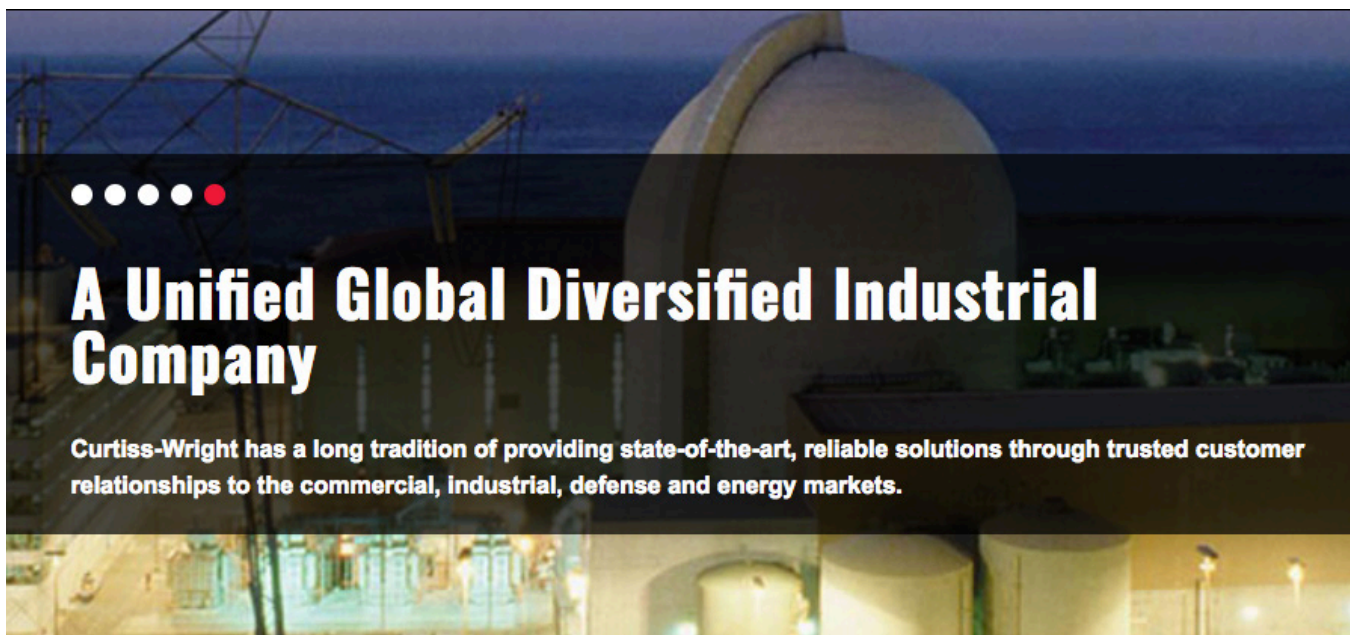
**Founded:** January 1929

**Principal/CEO:** Jim Leachman SVP and GM of Nuclear Division

**Federal Engagement:** DOE, NRC

### Preferred Point of Contact

Gary Wolski: [info@curtisswright.com](mailto:info@curtisswright.com)







## FAUSKE & ASSOCIATES, LLC (FAI)

[www.fauske.com](http://www.fauske.com)

FAI specializes in modeling and analyzing both power and non-power nuclear facilities, including light water and liquid metal cooled reactors (LMRs), as well as used fuel and legacy waste processing and storage facilities. Originally developed by Fauske & Associates, LLC (FAI), as part of the Industry Degraded Core Rulemaking (IDCOR) program, the Modular Accident Analysis Program (MAAP)—an Electric Power Research Institute (EPRI) owned and licensed computer software—simulates the response of light water and heavy water moderated nuclear power plants during a severe accident. FAI also developed FATE, a facility modeling code originally created to support design and safety analyses of uranium bearing waste during retrieval, packaging, transport, and storage at USDOE's Hanford site. FAI is active in specialized areas such as severe accident code development, dust and hydrogen explosion testing, reactive chemical calorimetry, and thermal-hydraulic experimentation to resolve practical problems such as water hammer and air intrusion in piping.

**Location:** Burr Ridge, IL

**Founded:** January 1980

**Principal/CEO:** Kris Fauske

**Federal Engagement:** DOE, GAIN, NRC

### Preferred Point of Contact

Sung Jin Lee: [info@fauske.com](mailto:info@fauske.com)



### We provide expert, custom, full service safety

testing, engineering, analytics, consulting and training solutions to nearly every industry. We use a data-backed approach to solve complex process safety problems and mitigate severe accidents.

#### Chemical & Industrial

We specialize in custom reactive chemical hazards, thermal hazards, process scale-up, relief system design, flammability, explosible/combustible dust hazards (DHA), process hazards analysis (PHA) and process safety management (PSM).

[LEARN MORE](#)

#### Nuclear

Custom design and engineering to ensure plant safety includes seismic analysis, obsolescence replacement and testing, D&D, computer software modeling, walkdowns, thermal hydraulics, Probabilistic Risk Assessment (PRA) and more.

[LEARN MORE](#)







## FISONIC ENERGY SOLUTIONS - POWER SYSTEMS DIVISION

[fisonicsolutions.com](http://fisonicsolutions.com)

Fisonic Energy Solutions designs pumping systems for power plants that require only heat to operate (no electricity), and use waste heat as a power source where possible.

**Location:** Waltham, MA

**Founded:** October 2016

**Principal/CEO:** CTO Ed Pheil

**Federal Engagement:** Other

**Preferred Point of Contact**

Ed Pheil: [ed.pheil@fisonic.us](mailto:ed.pheil@fisonic.us)





## FLUOR

[www.fluor.com](http://www.fluor.com)

Fluor is one of the world's largest publicly-traded engineering, procurement, fabrication, construction (EPFC) and maintenance companies, offering integrated solutions for clients' projects. For the past 70 years, Fluor has executed some of the most complex and challenging projects in the nuclear industry.

**Location:** Global

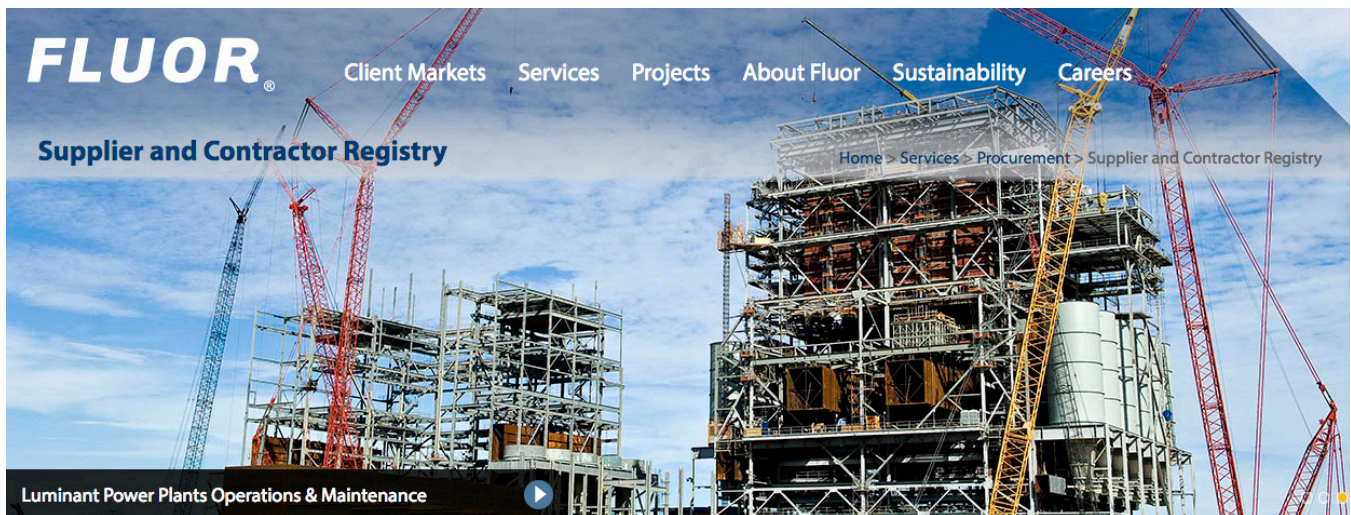
**Founded:** April 2012

**Principal/CEO:** David Seaton

**Federal Engagement:** DOE, NRC, Other

### Preferred Point of Contact

Brad Porlier: [brad.porlier@fluor.com](mailto:brad.porlier@fluor.com)





## GSE PERFORMANCE SOLUTIONS, INC.

[www.gses.com](http://www.gses.com)

GSE is the world leader in simulation systems and solutions for the nuclear power industry. GSE's technology allows the end user to conduct engineering and design studies, conduct "what if" analyses, and train personnel to exacting standards. GSE's technology is critical for customers to improve load factors, reduce operational risk, and lower operating costs.

**Location:** Sykesville, MD, Huntsville, AL, Navarre, FL

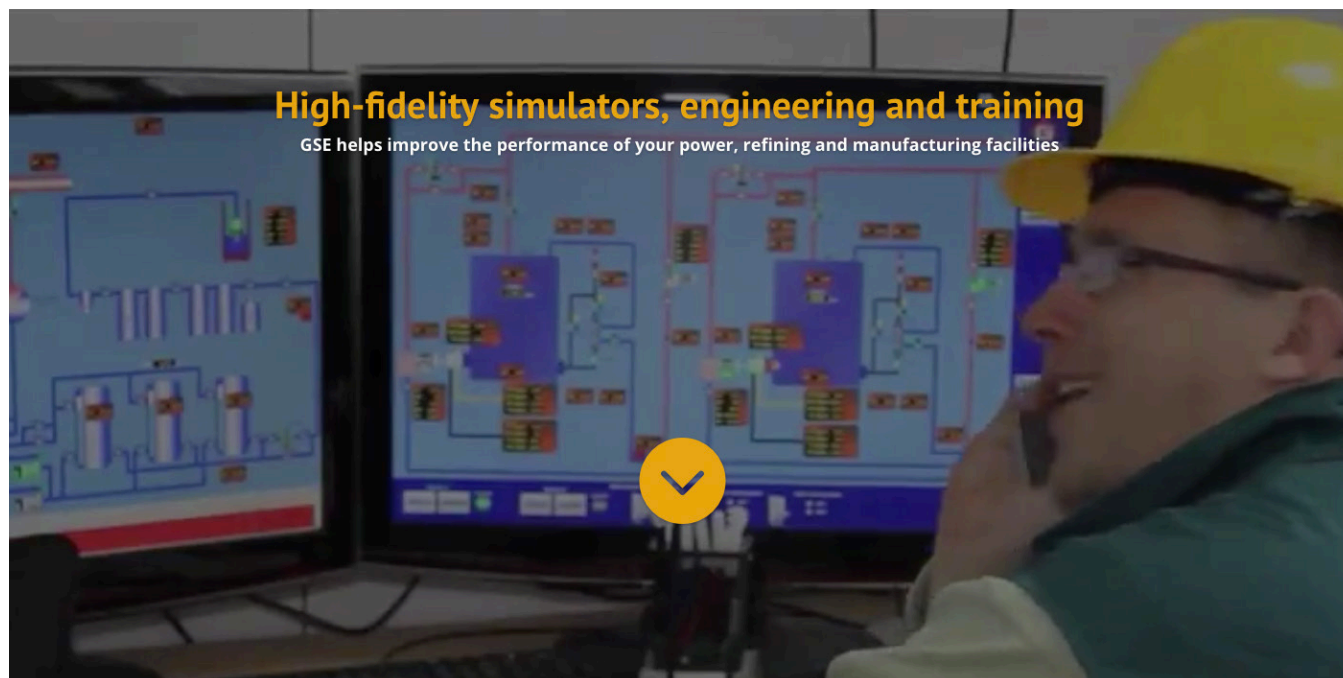
**Founded:** March 1994

**Principal/CEO:** Kyle Loudermilk

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC

### Preferred Point of Contact

Jay Umholtz: [info@gses.com](mailto:info@gses.com)







## H3D, INC.

[www.h3dgamma.com](http://www.h3dgamma.com)

H3D offers the world's highest-performance imaging spectrometers. Its technology is based on over a decade of groundbreaking research in the highly ranked Nuclear Engineering department at the University of Michigan.

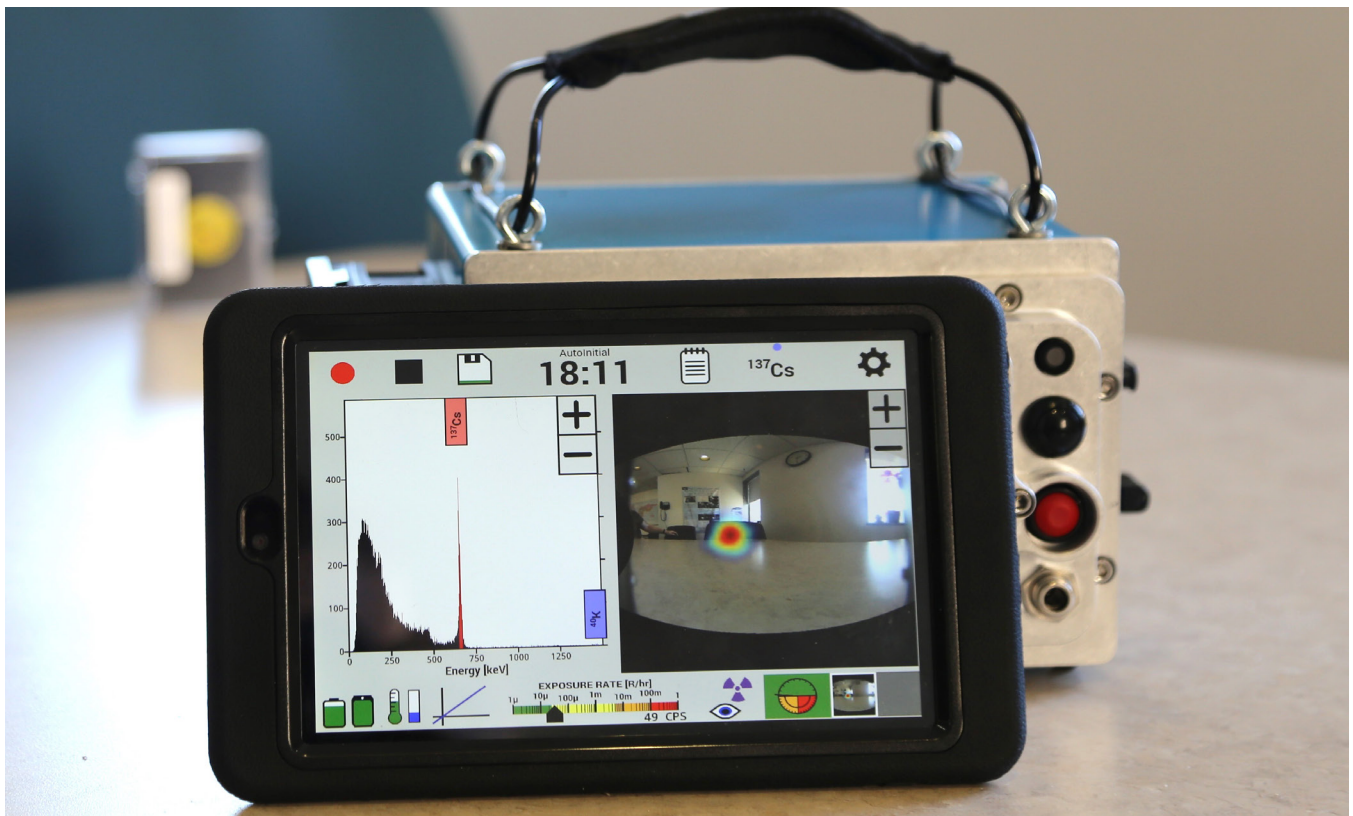
**Location:** Ann Arbor, MI

**Principal/CEO:** Willy Kaye

**Federal Engagement:** DOE

### Preferred Point of Contact

Y. Andy Boucher: [andy@h3dgamma.com](mailto:andy@h3dgamma.com)







## HIGH BRIDGE ENERGY DEVELOPMENT

[www.hba-inc.com](http://www.hba-inc.com)

High Bridge Energy Development conceptualizes and executes projects for advanced reactors and SMRs.

**Location:** GA, PA, OH, NY, CT, and AL.

**Founded:** December 2011

**Principal/CEO:** Steve R. Maehr

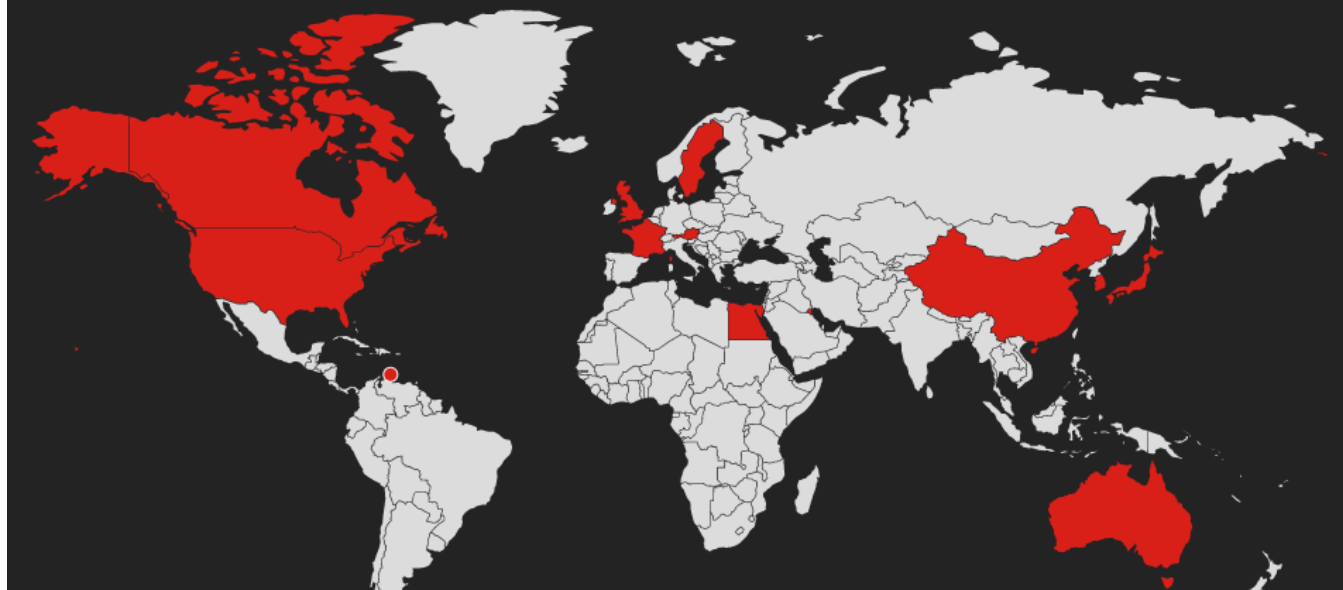
**Federal Engagement:** DOE, GAIN, ARPA-E, NRC

### Preferred Point of Contact

Philip Moor: 770.729.8755

### CLIENTS

High Bridge has supported clients on six continents with Nuclear, Fossil, Fusion and Science energy projects in Australia, Italy, Japan, Spain, the UK, Korea, South Africa, and France. Since 2006, HBA has supported the ITER Organization, a major international collaboration in Cadarache, France with the aim of demonstrating the scientific and technical feasibility of fusion technology as a reliable and sustainable low carbon footprint energy source.





## LIGHTBRIDGE CORPORATION

ltbridge.com

Lightbridge develops next generation fuel technology.

**Location:** Reston, VA

**Founded:** October 2006

**Principal/CEO:** Seth Grae

**Federal Engagement:** DOE, NRC

### Preferred Point of Contact

Seth Grae: 571.730.1200

An aerial night photograph of a city skyline, likely New York City, showing numerous illuminated skyscrapers and a bridge with orange lights. The image is used as a background for the company's mission statement.

At Lightbridge we are developing a way to  
impact the world's climate and energy  
problems soon enough to make a difference.



## MAIDANA RESEARCH

<https://www.maidana-research.com/>

MAIDANA RESEARCH specializes in engineering design and scientific research and provides technical, scientific and business consulting.

**Location:** ID, UT, Switzerland, Thailand

**Founded:** May 2015

**Principal/CEO:** Dr. Carlos O. Maidana

**Federal Engagement:** DOE, GAIN, Other

### Preferred Point of Contact

management@maidana-research.com



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## NUVISION ENGINEERING, INC

[www.nuvisioneng.com](http://www.nuvisioneng.com)

NuVision Engineering is a leading edge technology, remote handling, and applications engineering company focused on providing value in commercial nuclear and power plant industries, government waste remediation facilities and waste cleanup. For over 45 years, NuVision has developed an excellent reputation by consistently and proficiently applying expertise in science, technology, engineering, field services, fabrication, and staffing to satisfy customers' technical, schedule, and economic requirements. NuVision's customers include major NSSS suppliers, the US Department of Energy, public utilities, international governments, and a variety of domestic and international clients.

**Location:** Headquarters in PA; Other locations in NC and CO

**Founded:** March 1971

**Principal/CEO:** Van Walker – President and Chief Executive Officer

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

### **Preferred Point of Contact**

Joe Dixon: [info@nuvisioneng.com](mailto:info@nuvisioneng.com)





# Studsvik

## STUDSVIK SCANDPOWER

[www.studsvik.com/about-studsvik/organization/studsvik-scandpower](http://www.studsvik.com/about-studsvik/organization/studsvik-scandpower)

Studsvik Scandpower provides nuclear simulation software and services which manage fuel from arrival on site to departure in casks. Key software products include CASMO/SIMULATE, GARDEL, S3K, S3R, MARLA, SNF, and CASKLOAD.

**Location:** Global

**Principal/CEO:** Steve Freel

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

**Preferred Point of Contact**

Art Wharton: [art.wharton@studsvik.com](mailto:art.wharton@studsvik.com)





# **NATIONAL LABORATORIES**



## ARGONNE NATIONAL LABORATORY

[www.anl.gov](http://www.anl.gov)

Argonne is a multidisciplinary science and engineering research center, where scientists and engineers work together to answer the biggest questions facing humanity, from how to obtain affordable clean energy to protecting ourselves and our environment. Argonne was born out of the University of Chicago's work on the Manhattan Project in the 1940s, thier goal has been to make an impact—from the atomic to the human to the global scale. Argonne pioneered the application of nuclear fission for energy generation and maintains leading-edge experimental and computational capabilities for developing innovative reactor and fuel cycle systems.

**Location:** Lemont, IL

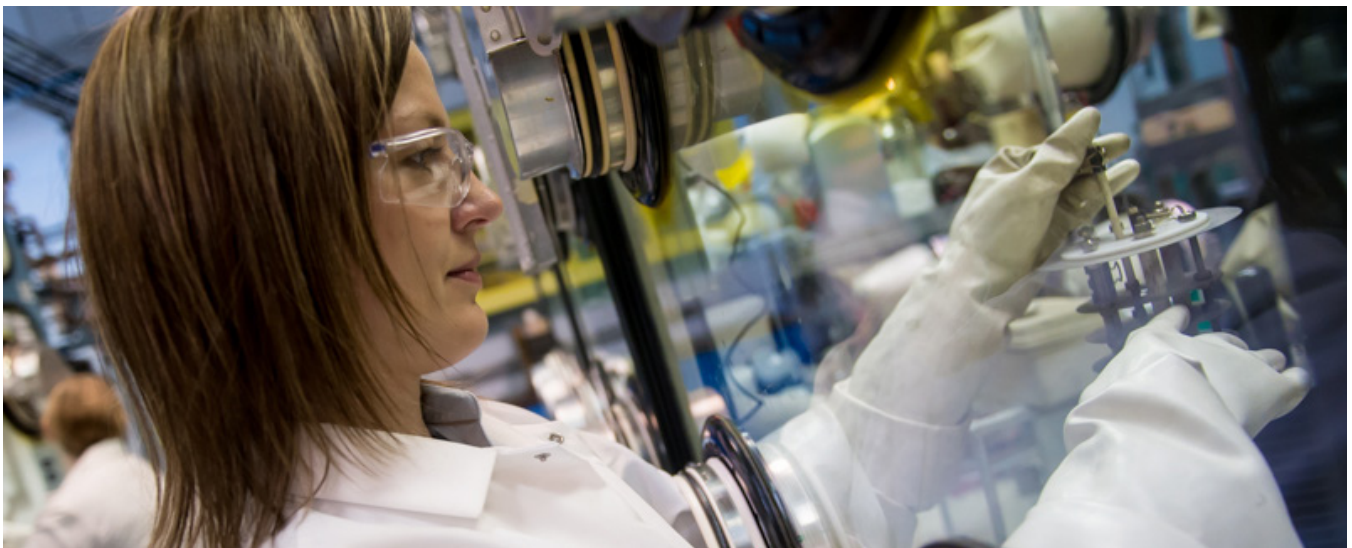
**Founded:** July 1946

**Principal/CEO:** Dr. Paul K. Kearns (director)

**Federal Engagement:** DOE-SC, DOE-NE, NNSA, DOE-EERE, U.S. NRC, ARPA-E, DOD, DHS

### Preferred Point of Contact

Hussein S. Khalil: [hkhalil@anl.gov](mailto:hkhalil@anl.gov), 630-252-7266





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A CENTURY OF SERVICE

## BROOKHAVEN NATIONAL LABORATORY

[www.bnl.gov/world](http://www.bnl.gov/world)

Brookhaven National Laboratory's Department of Nuclear Science and Technology conducts research and development related to nuclear technologies (reactors and accelerator-driven systems), reliability and risk assessment, and advanced modeling techniques for reactor simulation and energy systems.

**Location:** Upton, NY

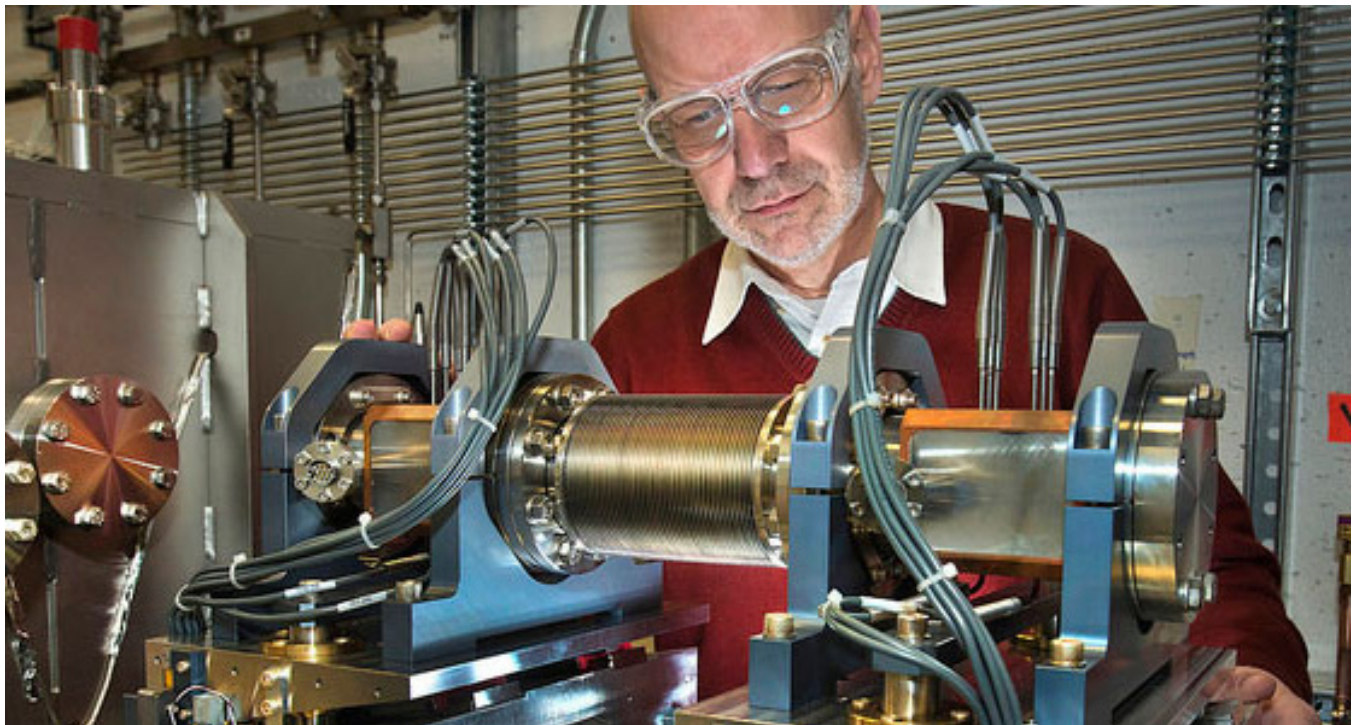
**Founded:** October 1947

**Principal/CEO:** Dr. Doon Gibbs

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

### Preferred Point of Contact

William C. Horak: [horak@bnl.gov](mailto:horak@bnl.gov), 631-344-2627







## IDAHO NATIONAL LABORATORY

[www.inl.gov/research-programs/nuclear-energy](http://www.inl.gov/research-programs/nuclear-energy)

Idaho National Laboratory (INL) is the nation's lead laboratory for nuclear energy research, development, demonstration, and deployment. INL's nuclear energy researchers work with unparalleled irradiation and post-irradiation examination, fuel fabrication and materials testing facilities to develop new fuels to extend the life of the current fleet, and to develop fuels and materials for advanced nuclear reactor designs. INL also leads many of the key initiatives of DOE's Office of Nuclear Energy, including the Gateway for Accelerated Innovation in Nuclear (GAIN), the Light Water Reactor Sustainability (LWRS) program and the Nuclear Science User Facilities (NSUF).

**Location:** Idaho Falls, ID

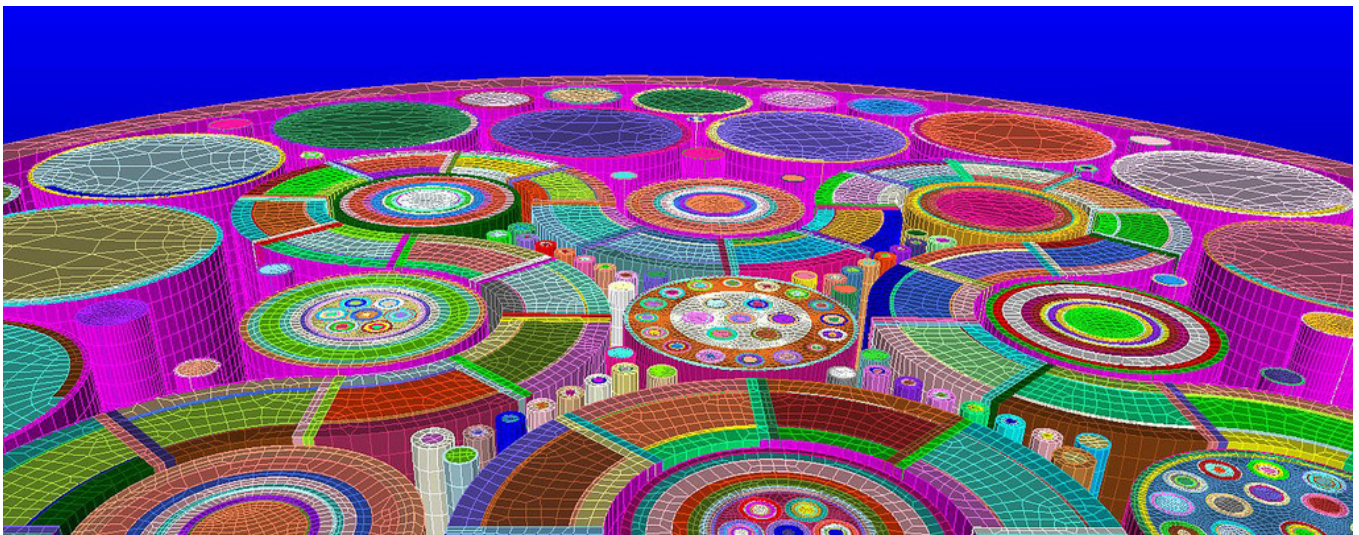
**Founded:** 1949

**Principal/CEO:** Dr. Mark Peters

**Federal Engagement:** DOE, GAIN, ARPA-E, NSUF, NEUP, NRC

### Preferred Point of Contact

Joseph Campbell: [Joseph.Campbell@inl.gov](mailto:Joseph.Campbell@inl.gov), 208-526-7785





## LAWRENCE BERKELEY NATIONAL LABORATORY

[www.lbl.gov](http://www.lbl.gov)

Lawrence Berkeley National Laboratory specializes in science and technology development for energy applications.

**Location:** Berkeley, CA

**Founded:** August 1931

**Principal/CEO:** Dr. Michael Withereil

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

### Preferred Point of Contact

Peter Hosemann: [peterh@berkeley.edu](mailto:peterh@berkeley.edu), 510-717-5752

Bringing Science Solutions to the World





## LOS ALAMOS NATIONAL LABORATORY

[www.lanl.gov](http://www.lanl.gov)

Los Alamos National Laboratory develops engineering and safeguard technologies and perform fundamental nuclear materials research for future nuclear reactor designs and fuel cycle options, detection technologies needed for global nuclear materials management, and modeling and simulation to support nuclear energy system decisions.

This work includes:

- fundamental advances in nuclear fuels and cladding materials
- nonproliferation safeguards
- reactor concepts
- reactor waste disposition

**Location:** Los Alamos, NM

**Founded:** 1943

**Director:** Dr. Charlie McMillan

**Federal Engagement:** DOE, GAIN, NRC, ARPA-E, Other

### Preferred Point of Contact

DV Rao: [dvrao@lanl.gov](mailto:dvrao@lanl.gov), 505-667-5098

#### Exascale Computing



Read about the role  
Los Alamos is taking in the  
[Exascale Computing Project](#)

#### Science Capabilities



Learn about the Lab's science  
capabilities organized under our  
four [Science Pillars](#)

#### LDRD



Find out how [Laboratory Directed  
Research & Development \(LDRD\)](#)  
fosters scientific innovation





## OAK RIDGE NATIONAL LABORATORY

[www.ornl.gov/science-area/nuclear-sciences](http://www.ornl.gov/science-area/nuclear-sciences)

Oak Ridge National Laboratory (ORNL) is the U.S. Department of Energy's largest science and energy laboratory with signature strengths in computing, materials, neutron science, and nuclear science and technology. ORNL provides science and technology capabilities and services to extend the life of our existing light water reactor fleet, create and develop concepts for advanced reactor technologies, develop accident tolerant and proliferation resistant nuclear fuel cycles, and support modernization of the U.S. nuclear regulatory infrastructure.

**Location:** Oak Ridge, TN

**Founded:** November 1943

**Principal/CEO:** Dr. Thomas Zacharia

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

### Preferred Point of Contact

Kenneth W. Tobin: [tobinkwjr@ornl.gov](mailto:tobinkwjr@ornl.gov), 865-576-9369

Andrew Worrall: [worralla@ornl.gov](mailto:worralla@ornl.gov), 865-576-9369







**Pacific Northwest**  
NATIONAL LABORATORY

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## **PACIFIC NORTHWEST NATIONAL LABORATORY**

**nuclearenergy.pnnl.gov**

Pacific Northwest National Laboratory conducts R&D across the nuclear fuel cycle to support DOE and industry in development of advanced materials, advanced fuels, and Gen IV reactors for the next generation of nuclear energy. Drawing on decades of expertise in nuclear science, engineering and regulation, along with its Category 2 Nuclear Facility assets, PNNL supports technology development across the TRL spectrum.

**Location:** Richland, WA

**Founded:** 1965

**Lab Director:** Dr. Steven F. Ashby

**Federal Engagement:** DOE, GAIN, NRC, ARPA-E, NNSA, DHS

### **Preferred Point of Contact**

Stephen D. Unwin: [Stephen.Unwin@pnnl.gov](mailto:Stephen.Unwin@pnnl.gov), 509-375-2448





# Sandia National Laboratories

## SANDIA NATIONAL LABORATORIES

[www.sandia.gov](http://www.sandia.gov)

A Federally Funded Research and Development Center for the National Nuclear Security Administration with a strong science, technology, and engineering foundation enables Sandia's mission to develop advanced technologies to ensure global peace through a capable research staff working at the forefront of innovation, collaborative research with universities and companies, and discretionary research projects with significant potential impact. Sandia National Laboratories unique mission responsibilities in the nuclear weapons program create a foundation from which they leverage capabilities, enabling them to solve complex national security problems.

**Location:** Headquartered in Albuquerque, NM and Livermore, CA.

**Founded:** October 1949

**Principal/CEO:** Dr. Steven Younger

**Federal Engagement:** DOE, GAIN, ARPA-E, NRC, Other

### Preferred Point of Contact

Richard Griffith: [rogrif@sandia.gov](mailto:rogrif@sandia.gov), 505-844-8232

Gary E. Rochau: [gerocha@sandia.gov](mailto:gerocha@sandia.gov), 505-845-7543





## SAVANNAH RIVER NATIONAL LABORATORY

[srnl.doe.gov](http://srnl.doe.gov)

Savannah River National Laboratory has core competencies in nuclear materials management and advanced materials design, manufacture, characterization and testing. SRNL has many unique laboratory facilities enabling the safe study and handling of nuclear materials and nuclear fuel as well as ultra-sensitive measurement and analysis of radioactive materials.

**Location:** Aiken, SC

**Founded:** 1951

**Principal/CEO:** Dr. Terry A. Michalske

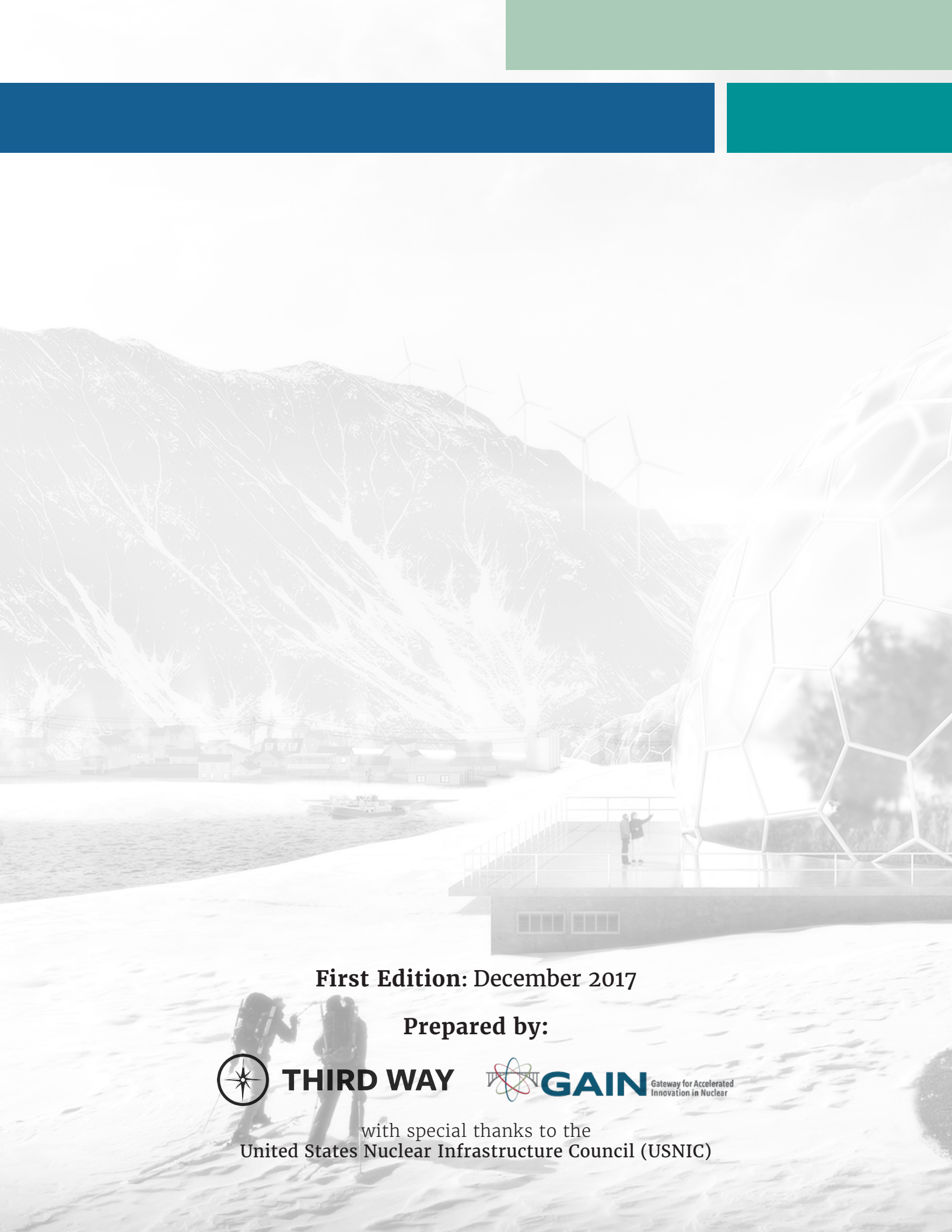
**Federal Engagement:** DOE, GAIN, ARPA-E, NRC

### Preferred Point of Contact

Kallie Metzger: [kallie.metzger@srnl.doe.gov](mailto:kallie.metzger@srnl.doe.gov), 803-725-6265







**First Edition: December 2017**

**Prepared by:**



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with special thanks to the  
United States Nuclear Infrastructure Council (USNIC)